FILE NOTATIONS

Entered in NID File ..✓..
Location Map Pinned ..✓..
Card Indexed .....

Checked by Chief P.W.B.
Approval Letter 8-21-73
Disapproval Letter .....

COMPLETION DATA:

Date Well Completed 10-13-73
Location Inspected .....

OW..... WW..... TA.....
GW..... OS..... PA..✓..

Bond released
State or Fee Land .....

LOGS FILED

Driller's Log..✓.....
Electric Logs (No.) .....

E..... I..... Dual I Lat..... GR-N..... Micro.....

BHC Sonic GR..... Lat..... Mi-L..... Sonic.....

CBLog..... CCLog..... Others.....

THE ANSCHUTZ CORPORATION

1110 DENVER CLUB BUILDING
518 SEVENTEENTH STREET
DENVER, COLORADO 80202
TELEPHONE 303—573-5665

August 17, 1973

Mr. Gerald R. Daniels
U. S. Geological Survey
8416 Federal Building
Salt Lake City,Utah 84111

Mr. Cleon B. Feight ✔
Utah Oil & Gas Conservation Division
1588 West North Temple
Salt Lake City, Utah 84116

Re: Anschutz #2 Federal 267
SE SE Sec. 27-19S-23E
Grand County, Utah
Federal Lease U-0143267

Gentlemen:

Transmitted herewith in triplicate is the APPLICATION FOR PERMIT TO DRILL (Form 9-331C) for the captioned well with survey plats and development plan for surface use attached. Also attached is a designation of operator in favor of Anschutz executed by Midwest Oil, lessee of record.

Yours very truly,

THE ANSCHUTZ CORPORATION

W. W. Wakefield
Vice President

WWW:kcw
Enclosure

Form 9-331 C
(May 1963)

SUBMIT IN ___LICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: Federal Lease U-0143267

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal 267

9. WELL NO.: 2

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 27-19S-23E

12. COUNTY OR PARISH: Grand

13. STATE: Utah

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: The Anschutz Corporation

3. ADDRESS OF OPERATOR: 1110 Denver Club Bldg., Denver, Co. 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: SE¼SE¼ Sec. 27 — 660' NSL, 660' WEL
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 15 miles southeast of Harley Dome, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
660'	960	----
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS***
-------	2600'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4890 KB 4880 GL

22. APPROX. DATE WORK WILL START*: 8-31-73

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9 1/2"	7 5/8"	20	100'	75 sx (circulated to surface)
6 3/4"	4 1/2"	9.5	2600'	150 sx

We propose to drill this well to an approximate total depth of 2600' in the Dakota formation. BOP program will be that generally used in this area. After setting surface casing, hole will be drilled with air, changing to mist and aerated mud as hole conditions require. No cores are planned; electric logs will be run to total depth. If production is encountered, casing will be set through the pay section and selectively perforated; fracing or acidizing may be necessary to stimulate production. Survey plats are attached. Designation of operator attached. Blanket drilling bond on file.

AOH - Case 101-5

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED W. W. Wakefield TITLE Vice President DATE 8-17-73

(This space for Federal or State office use)

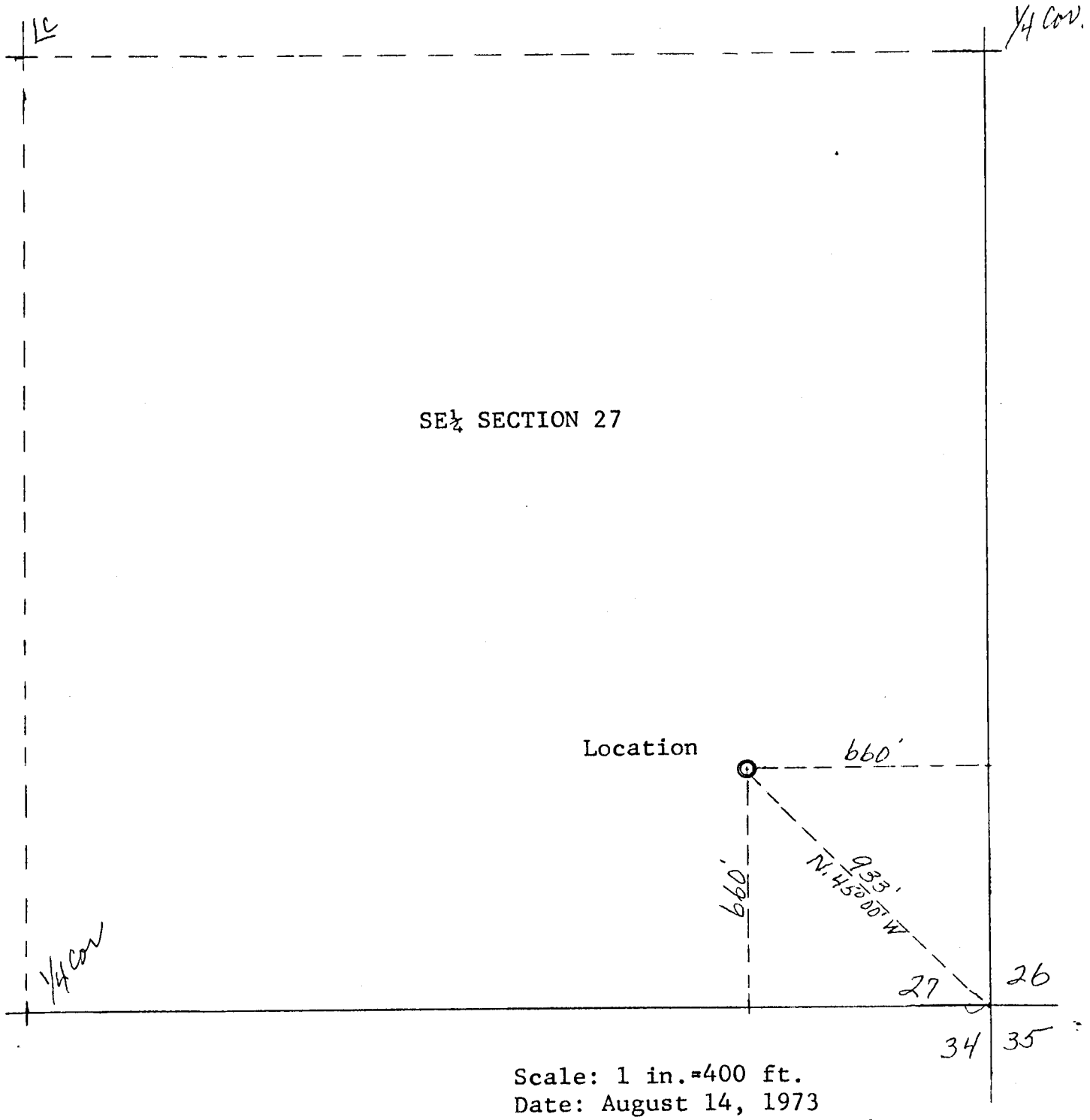
PERMIT NO. 43-019-30176 APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

LOCATION PLAT
FOR
ANSCHUTZ #2 FED.267 MIDWEST
SE.SE.SEC.27-19S-23E.
Elev.: 4880'grd.



Scale: 1 in.=400 ft.
Date: August 14, 1973
Surveyed by: W. Don Quigley

W. Don Quigley

PLAT NO.1

LOCATION PLANS FOR
ANSCHUTZ #2 FED.267-MIDWEST WELL
SE.SE.SEC.27-19S-23E.SLM.
GRAND COUNTY, UTAH

1. A survey plat (Plat No.1) is attached showing the location of the well. Map No.1 shows the route to the well site from Hwy 50-6 (I-70).

2. Map No.2 shows the access road to the well site from present roads. The proposed road is real close to the present road as shown on the map and is across relatively flat ground.

3. All present wells and dry holes around the proposed well site are shown on Map No.2.

4. See 1 & 2 above.

5. A plan for the location of production equipment at the well site, if the well is successful, is shown on Plat No.2. If oil, a pump jack (probably the one from the #1 Fed 267 well nearby), heater-treater, and tank battery will be installed. If gas, a dehydrator, flow lines, and fluids tank will be installed. This is a wildcat well, but there is a pipe line (The Tejas Line), about one mile south of the well site. Some of the test equipment used on the #1 Fed.267 well may also be used.

6. Water for drilling purposes and rig use can probably be obtained from nearby Cottonwood Creek; if not then from the Colorado River. The water will be hauled to the well site by truck.

7. A plat showing the plan for the placement of the drilling equipment to be used in the drilling of the well is shown on Plat No.3. This plat shows the reserve pit and burn (garbage) pit. Excess drilling mud, waste water, and cuttings will be deposited into the reserve pit during drilling operations. The garbage and burnable material will be put into the burn pit. At the completion of the well these pits will be folded-in and levelled.

8. See location of house trailers on Plat No.3.

9. No airstrip will be used in the drilling or completion

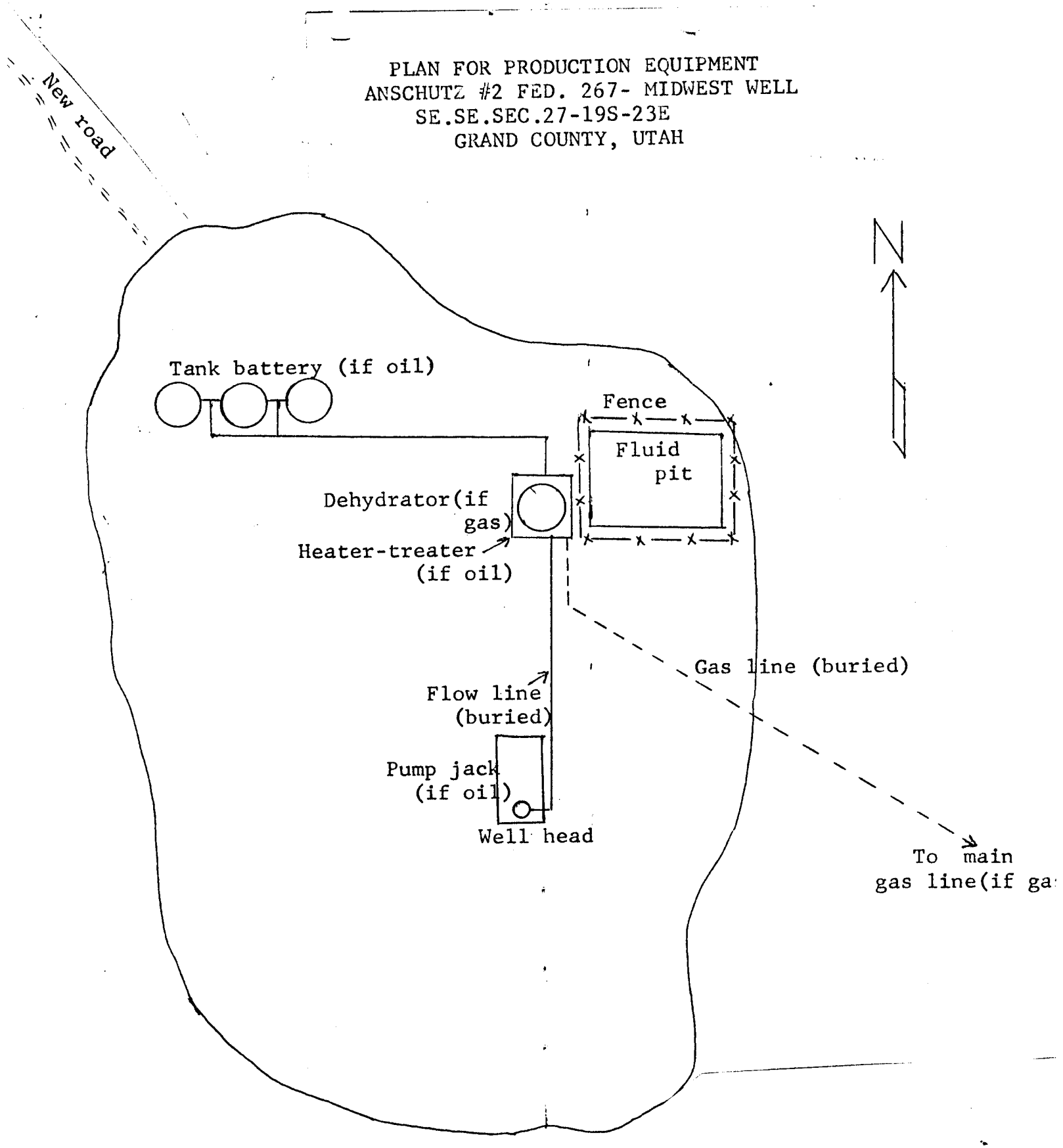
operations of this well.

10. See Plat No.3 for the drilling equipment layout.

11. The surface of the site is covered with sage brush and some grass. The soil is Mancos shale and is not really top-soil. The location will be graded level for the equipment; and since the area is quite level, there will be little grading. After the well is abandoned or completed, the site will be cleaned and levelled and the pits will be folded-in. The location could also be re-seeded, if the well is dry.

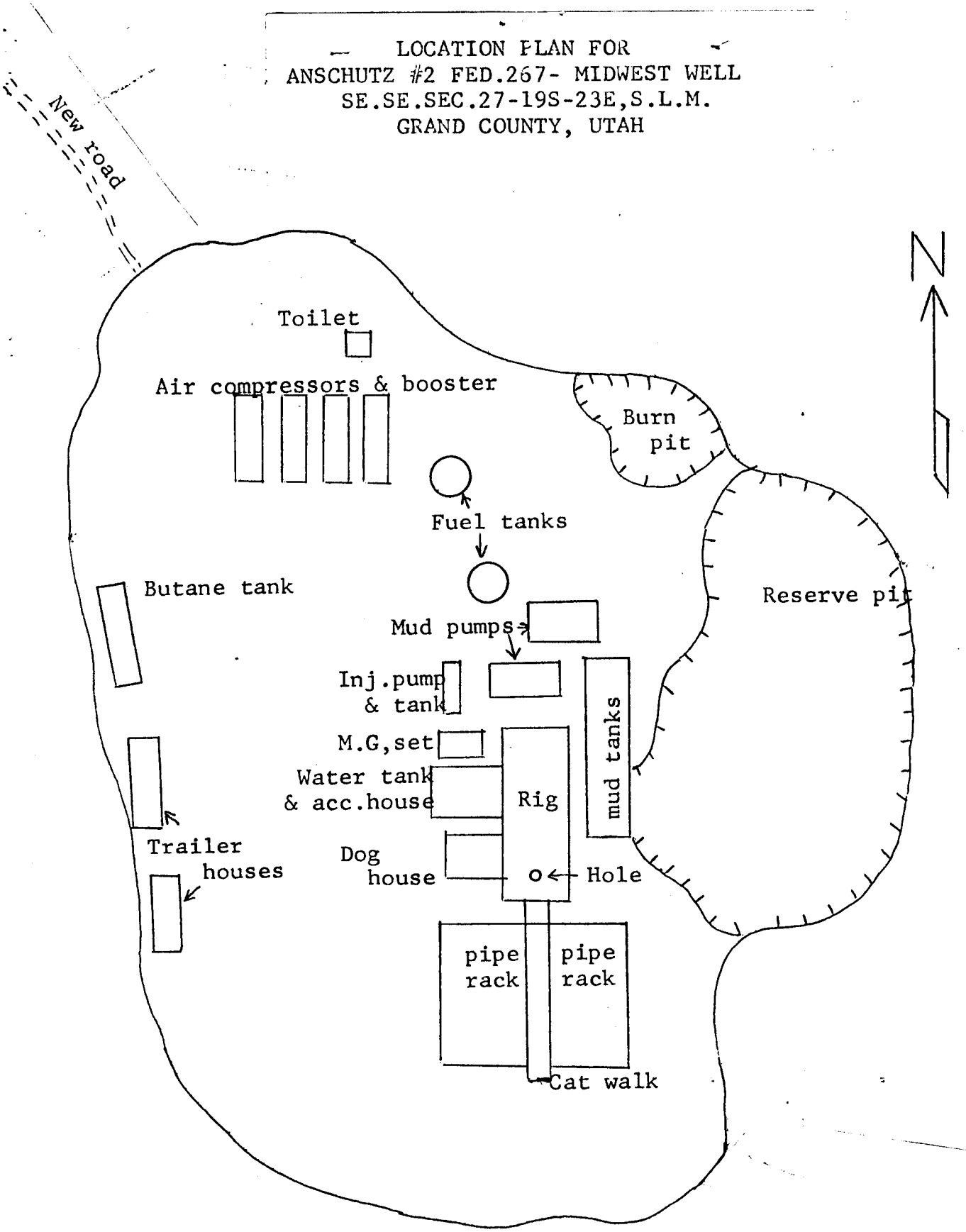
12. Access to the location is readily afforded by the present roads, and there will be no need for additional roads except the short 200-ft. to the location from the ranch road. Therefore the amount of dozer work and grading will be relatively little.

PLAN FOR PRODUCTION EQUIPMENT
ANSCHUTZ #2 FED. 267- MIDWEST WELL
SE.SE.SEC.27-19S-23E
GRAND COUNTY, UTAH



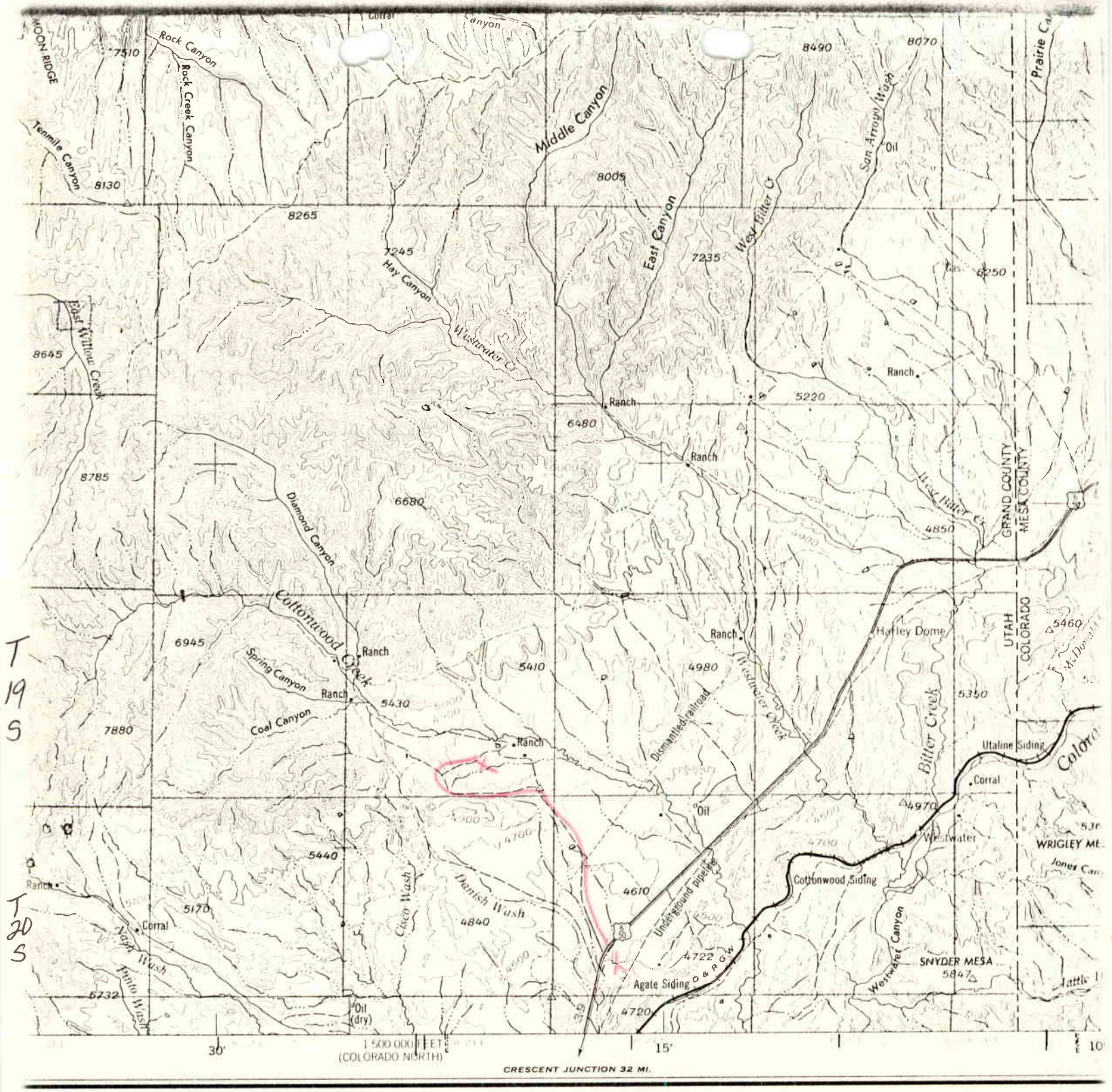
Plat No.2

LOCATION PLAN FOR
ANSCHUTZ #2 FED.267- MIDWEST WELL
SE.SE.SEC.27-19S-23E,S.L.M.
GRAND COUNTY, UTAH



Scale: 1 in.= approx.75 ft.

PLAT NO.3



LEGEND

ROAD DATA 1956

in red denote approximate distances in miles between stars

ANGELES
OMAHA
GALVESTON
Laramie
Grand Coulee
Sun Valley

ROADS

	3 LANES	4 LANES
Hard surface, heavy duty		
More than two lanes wide		
Two lanes wide; Federal route marker	5	
Hard surface, medium duty		
More than two lanes wide		
Two lanes wide; State route marker	11	
Improved light duty		
Unimproved dirt		
Trail		

Landplane airport
Landing area
Seaplane airport
Orchard
Woods-brushwood

Landmarks: School; Church; Other
Horizontal control point
Spot elevation in feet .221
Marsh or swamp
Intermittent or dry stream
Power line

Scale

5 0 5

5 0 5 10

5 0 5

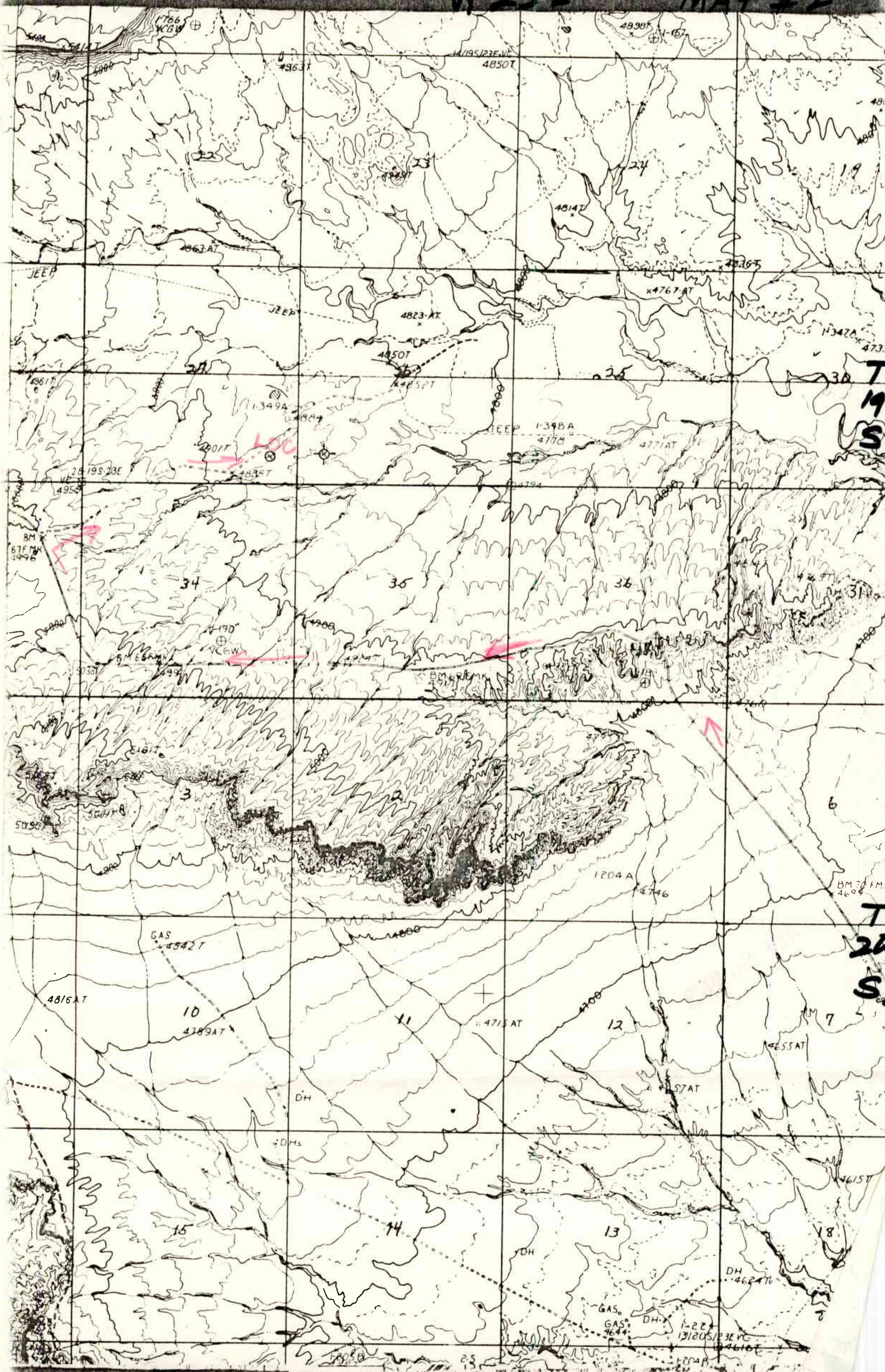
CONTOUR INT
WITH SUPPLEMENTARY CONT
TRANSVERSE MER

MAP #1

1955 MAGNETIC DECLINATION FOR THIS SHEET VARI
EDGE TO 14° 45' EASTERLY FOR THE CENTER OF THE

FOR SALE BY U.S. GEOLOGICAL SURVEY, DEN

R23E MAP #2


22
23
24
19
4863T
4850T
4814T
4863-AT
JEEP
JEEP
4823-AT
x4767-AT
4850T
4852T
1-349A
4884
LOC
JEEP 1-348A
4778
4771AT
28 19S 23E
4958
BM
34
35
36
31
WCGW
3
2
1
6
1204 A
4746
GAS
4842T
4816AT
10
4789AT
11
4715AT
12
7
4655AT
DH
15
14
13
18
DH
4624T
GAS
DH
1-224
13 20S 23E VC
T 19 S
T 20 S

August 21, 1973

The Anschutz Corporation
1110 Denver Club Building
Denver, Colorado 80202

Re: Well No. Federal 267 - #2
Sec. 27, T. 19 S, R. 23 E,
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with the Order issued in Cause No. 102-5.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL - Chief Petroleum Engineer
HOME: 277-2890
OFFICE: 328-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation relative to the above will be greatly appreciated.

The API number assigned to this well is 43-019-30176.

Very truly yours,

DIVISION OF OIL & GAS CONSERVATION

CLEON B. FEIGHT
DIRECTOR

CBF:sd
cc: U.S. Geological Survey

THE ANSCHUTZ CORPORATION

1110 DENVER CLUB BUILDING
518 SEVENTEENTH STREET
DENVER, COLORADO 80202
TELEPHONE 303—573-5665

October 5, 1973

Mr. Gerald R. Daniels
U. S. Geological Survey
8416 Federal Building
Salt Lake City, Utah 84111

Mr. Cleon B. Feight
Utah Oil & Gas Conservation Commission
1588 West Temple North
Salt Lake City, Utah 84116

Re: Anschutz #2 Federal 267
SE SE Section 27-19S-23E
Grand County, Utah
Federal Lease U-0143267

Gentlemen:

This is to advise that the captioned well was spudded at 5 PM, October 4, 1973. Surface casing (7 5/8") was set at 110' KB with 50 sacks cement. We expect that the well will reach the casing point on about October 11.

Yours very truly,

THE ANSCHUTZ CORPORATION

Robert M. Wakefield
Geologist

RMW:kcw

THE ANSCHUTZ CORPORATION

1110 DENVER CLUB BUILDING
518 SEVENTEENTH STREET
DENVER, COLORADO 80202
TELEPHONE 303—573-5665

October 15, 1973

AIR MAIL

Mr. Gerald R. Daniels
U. S. Geological Survey
8416 Federal Building
Salt Lake City, Utah 84111

Re: Anschutz #2 Federal 267
SE SE Section 27-19S-23E
Grand County, Utah
Federal Lease U-0143267

Dear Mr. Daniels:

Transmitted herewith in triplicate is the NOTICE OF INTENT TO ABANDON (Form 9-331) for the captioned well.

Yours very truly,

THE ANSCHUTZ CORPORATION

Robert M. Wakefield
Geologist

RMW:kcw
Enclosure

cc Mr. Cleon B. Feight
Utah O & G Conservation Commission
1588 West Temple North
Salt Lake City, Utah 84116

THE ANSCHUTZ CORPORATION

1110 DENVER CLUB BUILDING
518 SEVENTEENTH STREET
DENVER, COLORADO 80202
TELEPHONE 303—573-5665

October 16, 1973

Mr. Gerald R. Daniels
U. S. Geological Survey
8416 Federal Building
Salt Lake City, Utah 84111

Re: Anschutz #2 Federal 267
SE SE Section 27-19S-23E
Grand County, Utah
Federal Lease U-0143267

Dear Mr. Daniels:

Transmitted herewith in triplicate is the WELL COMPLETION REPORT AND LOG (Form 9-330) for the captioned well.

Yours very truly,

THE ANSCHUTZ CORPORATION

Robert M. Wakefield
Geologist

RMW:kcw
Enclosure

cc Mr. Cleon B. Feight
Utah Oil & Gas Conservation Commission
1588 West Temple North
Salt Lake City, Utah 84116

Form 9-330
(Rev. 5-63)

16

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLI (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: Federal U-0143267

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal 267

9. WELL NO.: 2

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 27-19S-23E

12. COUNTY OR PARISH: Grand

13. STATE: Utah

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: The Anschutz Corporation

3. ADDRESS OF OPERATOR: 1110 Denver Club Bldg., Denver, Colorado 80202

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: SE¼SE¼ Section 27 — 660' NSL
At top prod. interval reported below: 660' WEL
At total depth: see Sundry dated 10-5-73

14. PERMIT NO.: — DATE ISSUED:

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
10-4-73	10-11-73	P & A 10-13-73	4890 KB 4880 GL	---

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
2902	---	---	→	0-2902	---

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: NONE

25. WAS DIRECTIONAL SURVEY MADE: ----

26. TYPE ELECTRIC AND OTHER LOGS RUN: GR-density w/caliper (to be submitted by logging co. any)

27. WAS WELL CORED: no

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
7 5/8"	15	110' KB	9 5/8"	50 sx	----

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (*Interval, size and number*)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Robert M. Wakefield TITLE Geologist DATE 10-16-73

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "*Sacks Cement*": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

OCT 18 1973

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
			There were no cores. Hole was drilled with air. Open hole test of total Dakota section flowed estimated 5 MCFD

38. GEOLOGIC MARKERS

NAME	TOP: MEAS. DEPTH	TOP: TRUE VERT. DEPTH
Mancos	Surface	
Dakota silt	2288	
Dakota sand	2380	
Cedar Mtn	2530	
Salt Wash	2835	

THE ANSCHUTZ CORPORATION

1110 DENVER CLUB BUILDING
518 SEVENTEENTH STREET
DENVER, COLORADO 80202
TELEPHONE 303—573-5665

January 11, 1974

Mr. Gerald R. Daniels
U. S. Geological Survey
8426 Federal Building
Salt Lake City, Utah 84111

Mr. Cleon Feight
State of Utah
1588 West, No. Temple
Salt Lake City, Utah 84116

Re: Anschutz #2 Federal 267
SE SE Sec. 27-19S-23E
Grand County, Utah

Gentlemen:

In order to complete your files, we are enclosing a copy of the Drilling History and Geological Report on the above captioned well.

Yours very truly,

THE ANSCHUTZ CORPORATION

Kathy White

Kathy White

/k
Enclosure

DRILLING HISTORY

and

GEOLOGIC REPORT

on

ANSCHUTZ #2 FEDERAL 267 WELL
GRAND COUNTY, UTAH

November 20, 1973

by

W. Don Quigley
Consulting Geologist
Salt Lake City, Utah

DRILLING HISTORY
of
ANSCHUTZ #2 FEDERAL 267 WELL
GRAND COUNTY, UTAH

Operator:	The Anschutz Corporation Inc. 1110 Denver Club Bldg. Denver, Colorado 80202
Contractor:	Gunnison Drilling Company P. O. Box 2186 Grand Junction, Colorado 81501
Location:	SE.SE.Section 27, T.19 S.,R.23 E.,S.L.M. Grand County, Utah (660' from S-line & 660' from E-line)
Elevations:	Grd.: 4880'; D.F.: 4891'; K.B.: 4892'
Spudded-in:	October 4, I973
Finished Drilling:	October 11, 1973
Total Depth:	2902 ft.
Producing Formation:	None
Plugged & Abandoned:	October 13, 1973

History

Oct.2-3: Moving in rig & rigging up.

Oct.4: Finished rigging up. Drilled rat hole. Spudded in and drilled 9 3/4" hole to 110'. Ran 3 jts. of 7 5/8", 26.40#, J-55 casing & landed at 98.5'. Cemented with 50 sks of cement with returns to the surface. Waiting on cement to cure.

Oct.5: Drilled 110' to 550'(440'). Waiting on cement to cure and nippled up to drill ahead with air. Installed blow-out preventor and rotating head. Drilled ahead with 6 3/4" bit and air. Drilling at rate of 50 ft./hr.

Oct.6: Drilled 550' to 1656' (1106'). Drilling at rate of 50' to 60' per hr. & dusting good.

Oct.7: Drilled 1656' to 2476' (820').Drilling rate decreased at about 2200' which is the probable top of the Frontier section of the Mancos. This is about the same datum level of the Frontier in the nearby #1 Fed.267 well. The drilling rate really decreased at 2376'. This is the probable top of the Dakota formation. Samples were white, f.g. to m.g. qtz. ss. w/rd'd to sub rd'd grns. No fluoresence or shows. No gas. Drilling rate about 2.0 ft/hr. Next sand at 2495' contained some brn. dead oil specks without fluor. Encountered a small flare of gas at 2410'-2420'(about a 5-ft. flare).SS.was f.g.to m.g,, arg., but had some porosity and some water. Hole got damp and had to rig-up for air-mist drilling.

Oct.8: Drilled 2476' to 2687' (211"). Encountered third sand in Dakota at 2480' to 2500'. SS. is white to clr.,fg. to mg. w/rd'd grns and spotted blue fluor. Looks wet, and had more water in hole. Injection pump not working good and had trouble keeping hole clean. Had to work pipe loose a couple of times. Hit first green shale at about 2500'. This is the probable top of the Cedar Mountain formation. Encountered top of Buckhorn sand at 2530'. Sand was fg., rd'd, wh. to clr., had no fluor., & looked wet. No apparent increase in gas. Hit first red shale at 2550', below the sand. This is the probable top of the Morrison formation. Waiting on repairs for air compressor.

Oct.9: Drilled 2687' to 2721' (34'). Waiting on repairs for air compressor and getting booster to location. Roads are very muddy and in bad shape.

Oct.10: Drilled 2721' to 2818' (97'). Made rd-trip at 2735' for Bit #3. Bit #2 made 2625' (110' to 2735') in 85 hrs. Drilled at an avg. rate of 31 ft./hr.

Oct.11: Drilled 2818' to 2902' (84'). Encountered a thick sand in the Morrison formation at 2820' to 2860'. SS. was vfg., clr. qtz., w/rd'd grns, but had no shows or gas, ss. was hd & tgt. Hit another sand at 2895' which was fg., clr., qtz., w/rd'd grns, and had no shows. This was the second sand in the Salt Wash section of the Morrison and there was no need to drill deeper; so circulated hole and pulled 14 stds to wait on logging truck.

Oct.12: Waited 20 hrs. on logging truck. Went back in hole with 14 stds and circulated to clean hole prior to logging. Ran gamma-density log, but couldn't get below 2437' with tool, due to bridges in hole; so logged from that depth to the bottom of the surface casing.

Oct.13: Laid down drill collars and went back in hole with drill pipe and cleaned out hole to T.D. Installed the following cement plugs:

Plug No.1 - 2902' to 2750' ----- 25 sks.
Plug No.2 - 2600' to 2350' ----- 40 sks.
Plug No.3 - 150' to 20' ------25 sks.

Began rigging down.

W. Don Quigley

W. Don Quigley

GEOLOGIC REPORT
on
ANSCHUTZ #2 FEDERAL 267 WELL
GRAND COUNTY, UTAH

GENERAL GEOLOGY

The Anschutz #2 Federal 267 well was located as an offset well to the #1 Federal 267 well which was drilled in June 1972. The #1 Fed. well had excellent shows and recovered some oil from a test of the Dakota formation. This well was drilled with mud and attempts to complete it for commercial production were unsuccessful. The well was given a fracture treatment using diesel and sand; but produced only water with a scum of new oil after the treatment.

It was considered that an offset well, if drilled with air, would have a good chance for commercial production. Some gas was encountered in the Dakota formation, but the quantity was not considered sufficient to be commercial. The amount was estimated to be less than 50 MCFGPD. The well was successfully drilled with air, so there was no damage to the potential pay zones, and no hydrostatic pressure on the formations; and thus nothing to prevent any hydrocarbons from entering the well bore and getting to the surface.

The subject well had three different sands in the Dakota formation, a well developed Buckhorn sand in the Cedar Mountain formation, and at least three different sands in the Morrison formation; but unfortunately, most of the sands were tight and quartzitic, or contained considerable bentonite, thus porosity was limited. The lack of porosity and quartzitic nature of the sands suggests that the well was located near a fault, but this was not ascertained definitely.

The structural position of the well was almost identical or level with the #1 Fed. 267 well with respect to the top of the Dakota formation, and possibly about 25 ft. higher on the top of the Morrison. This latter correlation cannot be definitely confirmed, because the electric log of the subject well did not get deep enough to cover the top of the Morrison because of the bridges in the hole at the time of logging.

Regionally, the prospective area of the well is located on the flanks of the Cottonwood anticline to the west and on the flank of the Sieber Nose anticline to the east. However, these features tend to lose their identity in this area and blend together. This is probably due to the underlying basement ridge or dome which is indicated by the magnetics at a depth of about 5250' below the surface.

DRILLING HISTORY

A detailed daily drilling history of the subject well is given in the previous section. Little or no trouble was encountered in drilling this well with air. There were some delays due to equipment breakdown, and waiting on a booster due to bad roads and lack of available trucks, plus waiting on the logging truck. The air drilling operation was quite successful and the potential pay sands were undamaged by drilling fluids and hydrostatic pressures, and were thus thoroughly tested. Actual drilling of the well, without the delays, took less than 100 hours.

STRATIGRAPHY

Only the Mancos shale is exposed around the area of the well site. The Castlegate sand and Mesaverde rocks are exposed around the edges of the cliffs to the north and west of the location.

As mentioned above, the Dakota, Cedar Mountain, and Morrison sands were well developed in the subject well but lacked porosity. In general, they were tight, hard, quartzitic, and/or bentonitic; suggesting that the well location may have been near a fault zone. This however, cannot be determined definitely.

Unlike the nearby #1 Fed.267 well, the upper Dakota sand, 2380' to 2392', was only 12 ft. thick instead of 40 ft. thick. It was bentonitic and contained no gas or shows of hydrocarbons. The second sand, 2410' to 2435', about 16 ft. below the bottom of the first sand was about 25 ft. thick with some possible shale breaks and did contain a small amount of gas (less than 50 MCFGPD). This sand was also bentonitic and contained a small amount of water. The third Dakota sand at 2480' to 2500' was fine to medium grained, had slight spotted blue fluoresence, but probably contained more water.

The Buckhorn sand, 2530' to 2550', at the base of the Cedar Mt. formation was fine grained, tight, had no fluoresence, and looked wet. The Morrison sands were also tight, quartzitic, and contained no shows.

A detailed lithologic log of the well cuttings, from 720 ft. to 2902 ft,(T.D.) is attached hereto. The formations with their tops, thicknesses, and datum points which were encountered in the #2 Fed. 267 well, and which have been determined from the electric

log and/or sample log of the well are as follows:

Formation	Depth to Top	Thickness	Datum
Mancos	Surface	2380'	4892' K.B.
Dakota	2380'	120'	2512'
Cedar Mt.	2500'	50'	2392'
Morrison	2550'	----	2342'
Total Depth	2902'		

GAS ZONES

Several potential gas sands were penetrated in the subject well, but none produced sufficient gas to be commercial. Three different sands were penetrated in the Dakota formation. The upper sand was tight and quartzitic. The middle sand had a little gas, less than 50 MCFGPD, along with a small amount of water. The lower sand had a slight show of fluoresence but contained some more water. The amount of water was small, however.

The Buckhorn sand, which is a highly potentially productive gas sand in the area, appeared to be wet and contained no shows or gas.

The potential sands in both the Brushy Basin and Salt Wash sections of the Morrison were tight, quartzitic, and contained no shows.

CONCLUSION

The Anschutz #2 Federal 267 well was an offset to the #1 Federal 267 well which had a good chance of producing oil from the Dakota formation. The #2 well, however, had only a show of gas, less than 50 MCFGPD, and the sands were generally tight and bentonitic.

The structural information from the well indicates that the two wells were nearly level with each other. However, the quartzitic and bentonitic nature of the sands suggest that the well may have been near a fault, but this is not definitely established.

The gas and oil accumulations in the various sand lenses in the Dakota, Cedar Mountain, and Morrison formations is quite unpredictable in the area. A high structural position is not always the most successful. There is a probable hydrodynamic condition which has considerable influence on the hydrocarbon accumulations,

and the porosity-permeability condition of the sand lens is a controlling factor. Faults are definitely detrimental to the natural characteristics of the reservoir, and often the fault zones are flooded with fresh to brackish water. Thus a well should be placed a reasonable distance (600' to 1000') from any known fault zone.

Good gas wells are located less than two miles to the south, and about 3 miles to the southeast of the subject well. The geologic conditions surrounding these gas wells are not greatly different from those associated with the #2 well. There are, however, a number of dry holes around the gas wells and several of these dry holes have since been found to be located on or near fault zones.

W. Don Quigley

W. Don Quigley
Consulting Geologist
AAPG. Cert. #1296

Anschutz #2 Ned 367 700' - 1600'

SE SE) SEC. 27-11S-23E

Elev.: 4880 gnd; 4892 K.B.

700

DK. gry. calc. marine sh.

800

DK. gry. calc. mar. sh. & lt. gry bent. sh.

900

1000

DK. gry calc. mar. sh. + some aragonite

DK. gry. calc. mar. sh. w/ some oil sat. pcs.

1100

Some dk. gry arg. lms. & dk. gry calc. sh. w/oil sat. pcs.

DK. gry. v. calc. sh. & arg. lms. + bent. sh.

1200

Some lt. gry bent. sh.

Lt. tan to buff calc. sltst. & dk. gry calc. sh. & bent. - some amber qtz.

Lt. tan calc. sltst, gry to brn arg. lms.; dk gry calc. sh. & arag.

Lt. brn to gry xln lms. & gry calc. sh. & arag.

1300

1400

Calc. xls. & bent. - dk gry v. calc. sh.

Brn xln lms. - dk gry calc. sh., calc. xls. & arag + bent.

1500

Some lt. gry. vfg. calc. qtz. ss.; gry calc. sh. + lms.

Lt. brn slty arg. lms. - dk gry calc. sh. + bent.

Lt. tan bent. calc. sh. & gry calc. sh.

1600

K+E 46 0863 5 X 5 TO 1/2 INCH 7 X 10 INCHES MADE IN U.S.A. KEUFFEL & ESSER CO.

Anschutz #2 Fed. 87 1600' –

1600 Lt. tan calc. bent. sh. & gry calc. sh.

DK. gry calc. mar. sh. & bent

DK. gry calc. mica sh. & lt gry mica bent.

1700

Lt. gry to lt tan bent mica calc slst & dk gry sl. mica calc. sh.

1800 DK gry calc. mica sh – cryptoxln. lms(?)

Blk calc mar. sh

1900

2000 Some pyr.

Some lt gry to tan mica calc sh & slst.

Blk mica calc. sh.

Lt. brn xln lms; lt gry bent; & blk. calc. sh & pyr

2100

DK. gry vfg mica calc. & arg. ss (thin-beds) & dk gry calc. sh

DK gry vfg mica. calc. ss & slst

2200 DK gry vfg arg. ss & slst. – non-calc

Some lt. brn. xln lms

DK gry vfg arg ss & slst w/pyr. & bent.

DK gry arg slst.

2300 DK gry vfg arg. ss & slst w/pyr

Blk. silic calc sh

+ anhy

Kd Wh fg to m.g qtz ss. w/ rd'd to sub rd'd grns + no fluor. – DAKOTA – NO GAS

* Lt brn hd qtzitic ss. – tgt fg to congl (–cores)

* Some brn brecc oil specks – blk carb. sh. & pyr.

2400 Blk. carb sh. – gry slst & pyr.

* DK gry vfg sdy ss w/ slst – (damp) & pyr. + small flame of gas on corr.

* Lt. gry to wh m.g. bent ss w/sub rd'd grns

Lt gry bent tgt. fg to cg. ss + blk carb sh & lt gry bent sh.

Lt. gry qtzitic calc. ss. w/ qtz xls & grns

Wh to cln qtz fg. ss. & pyr. – sl. spotted blue fluor. – looks wet

Cln. m.g. qtz ss w/ rd'd grns – wet – some grn sh.

2500 Kcm Cln. qtz ss. & gry grn. & rd sdy calc sh. + some blk sh.

Varic. calc. sdy sh. & thin beds of qtzitic ss.

Wh. to cln fg qtz ss w/well rd'd grns + rd & grn sh. (looks wet) no fluor.

Jm Rd. brn. grn purp & gry silic sh. & slst. + some wh. vfg tgt. ss

Brick rd. pur & grn slst & sh.

Gry to brn. vfg. arg. ss. & varic. slst & sh.

2600

Marchuty # Fed. 267 2600' – 2902'

2600
Varic. sl. silk. sltst.
Rd. gry, purp, & grn. sltst & sh.
"
"
"
& lt. brn chert

2700
Same lt brn qtzitic to gry ss. – Varic. sh & sltst & ch.
Grnish arkosic lrty tyt ss. –
Varic sltst & sh.
Lt. gry to brn & qtzitic ss. & varic. sh & sltst & ch.
Varic. sdy sh. & sltst. w/ ch. & qtzitic ss.
Varic. dol. sh. & sltst. – v. hd

2800
"
"
& ch.
Lt brn to lt. gry v.f.g. qtzitic ss. – no fluor.
Wh vfg qtz ss. No shows Ang. grns
Varic. sdy sh. & sltst.
Wh to clr vfg qtzitic ss w/ ang grns
Gry & grn sdy sh & sltst
Wh f.g. qtz ss w/ rnd grns – no shows

2900

3000

THE ANSCHUTZ CORPORATION

1110 DENVER CLUB BUILDING
518 SEVENTEENTH STREET
DENVER, COLORADO 80202
TELEPHONE 303—573-5665

June 4, 1975

Mr. Gerald R. Daniels
U. S. Geological Survey
8426 Federal Building
Salt Lake City, Utah 84111

Mr. Cleon B. Feight
Utah Division of Oil and Gas Conservation
1588 West North Temple
Salt Lake City, Utah 84116

Re: Anschutz #2 Federal 267
SE SE Sec. 27-19S-23E
Grand County, Utah
Federal Lease U-0143267

Gentlemen:

Transmitted herewith is the SUBSEQUENT REPORT OF ABANDONMENT on the captioned well.

We are advised by our drilling and production department the location is ready for inspection.

Yours very truly,

THE ANSCHUTZ CORPORATION

Robert M. Wakefield
Geologist

RMW:kc
Enc.

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
Federal U-0143267

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

1. OIL WELL ☐ GAS WELL ☐ OTHER DRY HOLE

7. UNIT AGREEMENT NAME

2. NAME OF OPERATOR
The Anschutz Corporation

8. FARM OR LEASE NAME
Federal 27

3. ADDRESS OF OPERATOR
1110 Denver Club Building, Denver, Co. 80202

9. WELL NO.
2

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
SE¼SE¼ Section 27 660' NSL
660' WEL

10. FIELD AND POOL, OR WILDCAT
wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
27-19S-23E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4890 KB 4880 GL

12. COUNTY OR PARISH
Grand

13. STATE
Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	X
REPAIR WELL	☐	CHANGE PLANS	☐				
(Other)				(Other)			

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

This well was drilled to a total depth of 2902' in the Salt Wash formation. There were no cores. Hole was drilled with air; gas volume from the total Dakota section was estimated at 5 MCFD. This well was plugged and abandoned 10-13-73 with plugs set as follows(*):

Cement	Depth
5 sx	Surface w/marker
25 sx	150-250' (across base of surface casing @ 110')
40 sx	2300-2600'
25 sx	2700-2902'

(*)As proposed by Mr. Quigley and approved by USGS.

18. I hereby certify that the foregoing is true and correct

SIGNED Robert M. Wakefield TITLE Geologist DATE 6-5-75

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side